

# ADAPTIVE MANAGEMENT PROGRAM 2024 ACCOMPLISHMENTS

In 2024, the Adaptive Management Program (AMP) engaged in a wide range of administrative tasks and research projects. This document highlights just some of the substantive accomplishments that occurred during the year. These accomplishments demonstrate a comprehensive approach to research, training, personnel management, and collaboration within Cooperative Monitoring, Evaluation, and Research Committee (CMER) and TFW Policy Committee (TFW Policy) and its related committees. The AMP's focus on Structured Decision-Making (SDM) and adherence to rigorous scientific methods underscores a commitment to informed and effective resource management.

## AMP Administration:

### Independent Scientific Peer Review (ISPR):

The following AMP documents completed ISPR during 2024:

- Deep-Seated Landslide (DSL) Study Design
- Westside Type F Riparian Prescription Effectiveness-Exploratory Field Study

### 2025-2027 CMER Work Plan and FY25-27 Master Project Schedule:

- 2025-2027 CMER Work Plan was reviewed and approved by CMER.
  - The CMER Work Plan was improved by conducting project assessments to identify projects that have been completed and/or withdrawn and project additions that may be considered by TFW Policy should there be a positive variance at fiscal year/biennium rollover as a recommendation to the Forest Practices Board (Board). The completed and withdrawn projects were moved to their own appendices, streamlining the main document to focus on current and upcoming work, a section about the Schedule L-1 Performance Targets review and revision was added, and tables were reformatted for readability. These changes will inform TFW Policy on upcoming prioritization efforts.
- TFW Policy approved the FY2025-2027 Master Project Schedule (MPS) and the Board approved the MPS in August.
  - The TFW Policy Budget Workgroup and the AMPA utilized the Contingency Plan to develop two FY2026-FY2027 MPS scenarios based on current revenue forecast projections for General Funds State proviso (GF-S) and Forest and Fish Support Account - AMP (Business and Occupation Tax surcharge).
  - The TFW Policy Budget Workgroup continues to meet monthly to ensure the spending plan reflects the AMP priorities.

### State Auditor's Office (SAO) Recommendations Advancements:

- CMER completed Protocol and Standards Manual (PSM) revisions to improve process, transparency, and accountability.
- Schedule L-1 workgroup was formed to prioritize Performance Targets for revision and develop a process to form Subject Matter Expert (SME) groups, both were approved by CMER and TFW Policy. This resulted in the formation of 3 SME groups, Wetlands, Riparian, and Instream, which will review and make recommendations for revision on 9 Performance Targets. TFW Policy will make recommendations for Board consideration.
- AMP participants attended a 2-day SDM course hosted by a team of instructors with USGS Washington Cooperative Fish and Wildlife Research Center. The SDM workshop

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- outlined the fundamentals of decision analysis, with an emphasis on participatory discussion and hands-on practice, including the structure of decisions, articulating objectives, developing creative alternatives, using the best available ecological and social science to evaluate alternatives, methods for analyzing different classes of decisions, and the role of uncertainty and adaptive management.
- AMP participants attended a joint SDM workshop with Compass Management in Eastern Washington in September to support making informed and transparent choices in complex decisions.
  - Completion of a [public-facing dashboard](#) to improve transparency and accountability. Dashboard improvements: each project has a unique URL, which provides the ability to share individual projects to partners and the public and to link projects in relevant documents, and document URL remains the same with future iterations to prevent outdated links overtime as documents are linked in multiple locations.

## Dispute Resolution:

- The CMER Non-CMER Science/Outside Science Dispute was initiated, classified as CMER Process Dispute and was resolved. The AMPA reviewed the 6 position papers that were received after the informal dispute meeting. Resolution included halting CMER efforts on Non-CMER Science/Outside Science until TFW Policy completes its guidance.
- TFW Policy initiated Stage 1 of Dispute Resolution regarding Non-CMER Science/Outside Science in December.
- TFW Policy began the Alternative Harvest Prescription workgroup to work toward a consensus agreement in April 2023. Since consensus could not be reached, Stage 1 was initiated September 2024 and TFW Policy is currently in Stage 2.

## Research Projects Highlights:

- [Roads Prescription-Scale Effectiveness Monitoring Project](#)
  - The Project Team, with support from the DNR Pacific Cascade Region, completed numerous parameterization experiments including:
    - Short Time Scale Turbidity Experiment in January,
    - Sediment Trap Efficiency Experiment in June, and
    - Ditchline Hydraulics Experiment for silt traps in October.
  - The Project Team-
    - worked with the AMP statistician consultant to develop a convolution neural network model to systematically count and classify traffic camera images;
    - successfully completed annual road and ditch maintenance with support from the DNR Pacific Cascade and South Puget Sound Regions;
    - completed the second of 2 interim reports and delivered it to CMER in August. This report summarizes the implementation and preliminary results of the major experiment and 6 parametrization experiments which augment the major experiment field results and enhance the modeling component of the project;
    - completed annual flume calibration at all high flow sites;
    - completed the 5<sup>th</sup> water year of major experiment data collection and has now begun the 6<sup>th</sup> and final water year of data collection; and

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- Principal published [Using additional roughness to characterize erosion control treatment effectiveness in roadside ditch lines](#), in *Earth Surface Process and Landforms*.

## Wetlands Scientific Advisory Group (WetSAG)

- Forested Wetlands Effectiveness Project (FWEP)
  - The Project Team completed the first year of site monitoring and data collection monitoring hydrology, water quality, canopy structure, vegetative community, and timber stand characteristics.
  - In October the Project Team completed vegetation surveys.
  - WetSAG hosted two fieldtrips, one in July in the Olympic Peninsula and one in October to wetlands located in the Central Cascades to observe wetland hydrology, vegetation, and timber characteristics. The focus of the field trips was to develop a better understanding of how wetlands vary across the hydrological gradients found in Washington and the methods used to measure stand development and vegetation community in forested wetlands.
  - The Chronosequence Study will continue until October 2025, capturing 2 full water years. Results from this study will be used to inform the design of future FWEP studies.
- Wetland Management Zone Effectiveness Monitoring Project (WMZ)
  - The development of Scoping Documents such as the Best Available Science Document and Prospective Six Questions Document is currently on hold while CMER discusses, reviews, and potentially revises Schedule L-1 Wetland Performance Targets. Schedule L-1 Performance Target revisions may have implications on how WMZ is scoped. Funding for the WMZ begins in FY26, with implementation slated to begin in FY28.

## In-Stream Scientific Advisory Group (ISAG)

- Anadromous Fish Floor (AFF) Validation Study
  - AFF Technical Memo was approved by CMER and TFW Policy, which recommended that the AFF study be implemented separately as a companion study that would be integrated in the AMP Water Typing Strategy. And that, along with the PHB and DPC studies, it would best fit early in the Water Typing Strategy project sequence, ahead of modeling and mapping.
  - The Project Team conducted an after-action review of previous AFF work to identify lessons learned and data gaps and is currently drafting a Project Charter, which will outline project information, such as the project objectives and timeline.
- Potential Habitat Breaks (PHB)
  - DNR hired a new CMER Natural Resource Science Technician to support the PHB Validation Implementation.
  - The Project Team is working on desktop site screening and landowner access, with field implementation expected to begin in spring 2025. A solicitation for implementation of the PHB and DPC studies was completed, successful bidder accepted, and contract negotiations were completed. Project implementation will begin March 2025.
- Default Physical Criteria (DPC)
  - The Study Design was approved by CMER in December to send to ISPR.

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### Upslope Processes Scientific Advisory Group (UPSAG)

- Unstable Slopes Criteria Projects
  - Unstable Slopes Criteria Charter was approved by CMER.
  - Empirical Evaluation of Shallow Landslide Susceptibility, Frequency, and Runout by Landform Project Management Plan and Prospective 6 Questions document were approved by UPSAG and CMER.
  - The Object-Based Landform mapping project Final Report is delayed but is expected to be delivered to CMER March 2025.
- Deep-Seated Landslide Research Strategy
  - Study Designs for the Deep-Seated Landslide Mapping and Landslide Classification projects were combined and approved by ISPR and CMER.
  - Deep-Seated Landslide Mapping and Classification project Prospective 6 Questions document approved at UPSAG and CMER and delivered to TFW Policy along with a presentation on the CMER-approved Study Design.
  - A solicitation for implementation of the Deep-seated Landslide Mapping and Classification project was completed, accepted the successful bidder, and developed a contract to begin implementation.

### Scientific Advisory Group-Eastside (SAGE)

- Eastside Timber Habitat Evaluation Project (ETHEP)
  - Prospective 6 Questions were approved by SAGE and CMER.
  - The Project Team presented Phase I: Desktop Modeling to SAGE in May and completed field data collection across Eastern Washington in November.
  - Principal Investigator gave a presentation to CMER at the September meeting. This project is slated for completion in 2025.
- Eastside Forest Health Strategy
  - CMER Scientist has begun collecting Geospatial datasets and additional literature while conducting a desktop analysis of Burn Severity on lands subject to the Forest Practices Habitat Conservation Plan (HCP). This exercise will be used in the continued development of the Eastside Forest Health Strategy document, which would outline a series of studies or projects that will provide insight to the critical questions.
- Eastside Type N Riparian Effectiveness Project (ENREP)
  - ENREP Limited Extension Prospective 6 Questions approved by CMER and delivered to TFW Policy.
  - TFW Policy approved an extension for three additional years of post-harvest data collection, beyond the two years post-harvest monitoring indicated in the approved Study Design. The report on the initial approved study design (2 years post-harvest monitoring) will be delivered as scheduled, at the end of 2027.
  - Harvest was completed at Fish Creek study basin, the final of 5 study basins to be harvested.

### Riparian Scientific Advisory Group (RSAG)

- Riparian Characteristics and Shade (RCS)

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- 2 project sites in the Northwest Coast ecoregion were implemented in summer 2024.
- The RCS Project Team did a site visit in September to discuss the harvest layout, lessons learned, and improvements to standardize data collection across the 3-day harvest sequence.
- The Principal Investigator (PI) is analyzing data collected from the 2024 field season and identifying sites in the West Cascades ecoregion for implementation in 2025.
- [Extensive Riparian Status and Trends Monitoring-Riparian Vegetation and Stream Temperature \(ExMo\) Project](#)
  - The Project Team continued to develop the Scoping Document and the Best Available Science (BAS) document, with expected completion and final review/approval process slated for early 2025.
- [Riparian Function Literature Synthesis](#)
  - The Riparian Function Literature Synthesis was approved by RSAG and delivered to CMER to initiate their review in May.
  - CMER reviewers acknowledged that the document serves more as a literature review and annotated bibliography than a synthesis and expressed concern that details of some studies were not portrayed accurately. CMER reviewers will identify and correct any factual inaccuracies by January 30, 2025. The document is expected to be considered for approval at the February 2025 CMER meeting.
- [Westside Type F Riparian Prescription Effectiveness-Exploratory Field Study](#)
  - The Project Team completed the final exploratory report revisions in response to ISPR comments in April. CMER approved the report in May.
  - The Project Team completed the Final Six Questions and developed a Findings Package which was approved by CMER in August.
  - TFW Policy received the Findings Report for the Westside Type F Exploratory Study at their September meeting. At the November meeting, TFW Policy unanimously agreed that the report does not warrant a rule change by the FPB and requested the AMPA to forward and facilitate a presentation by the PIs to the FPB. TFW Policy will initiate a dialogue with CMER on the Type F Experimental Buffer Treatment Project (ex. 25-27 CMER Work Plan 5.3.7.3).

### [Landscape and Wildlife Scientific Advisory Group \(LWAG\)](#)

- [Type N Experimental Buffer Treatment Project in Hard Rock Lithologies Amphibian Monitoring Phase III Project](#)
  - The Project Team completed data analysis, and the draft Final Report was delivered to CMER. Approval of the Final Report is expected by June 2025.
- [Temperature and Amphibians in Discontinuously Flowing Np Reaches](#)
  - The Scoping Document was approved by CMER and TFW Policy.
  - The Project Team has begun Study Design development.